

**IN THE CLAIMS**

For the convenience of the Examiner all pending claims of the present Application are shown below whether an amendment has been made or not:

1.     **(Original)** A method for recovering a communication session after failure of an endpoint, comprising:
  - establishing a communication session between a first endpoint and a second endpoint;
  - receiving keep alive signals from the first endpoint;
  - detecting an interruption in the keep alive signals;
  - maintaining a connection with the second endpoint after the interruption; and
  - reestablishing the communication session between the first endpoint and the second endpoint if the keep alive signals resume within a predetermined time period.
2.     **(Original)** The method of Claim 1, further comprising transferring the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within the predetermined time period.
3.     **(Original)** The method of Claim 1, further comprising:
  - notifying the second endpoint that the first endpoint has failed; and
  - communicating a message to the first endpoint instructing the first endpoint to reboot.
4.     **(Original)** The method of Claim 2, wherein:
  - the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;
  - the third endpoint is also associated with the user in the directory; and
  - the method further comprises:
    - determining the user associated with the first endpoint using the directory; and
    - determining that the third endpoint is also associated with the user.
5.     **(Original)** The method of Claim 2, wherein the third endpoint is a voice mail system associated with a user of the first endpoint.

6. **(Original)** A method for recovering a communication session after failure of an endpoint, comprising:

- establishing a communication session between a first endpoint and a second endpoint;
- receiving keep alive signals from the first endpoint;
- detecting an interruption in the keep alive signals;
- maintaining a connection with the second endpoint after the interruption; and
- transferring the communication session with the second endpoint from the first endpoint to a third endpoint.

7. **(Original)** The method of Claim 6, wherein:  
the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;

- the third endpoint is also associated with the user in the directory; and

- the method further comprises:

- determining the user associated with the first endpoint using the directory;
  - determining that the third endpoint is also associated with the user; and
  - selecting the third endpoint for the communication session.

8. **(Original)** The method of Claim 6, wherein:  
the first endpoint further comprises a reset button; and  
the first endpoint is further operable to stop communicating keep alive signals in response to a user pressing the reset button.

9. **(Original)** The method of Claim 6, wherein the first and third endpoints are interactive voice response (IVR) servers.

10. **(Original)** The method of Claim 9, further comprising:  
storing status information for the first endpoint; and  
using the status information to resume the communication session with the third endpoint from approximately a point at which the interruption in keep alive signals was detected.

11. **(Original)** A method for reestablishing a communication session, comprising:  
establishing a communication session between a first endpoint and a second endpoint;  
receiving from a user of the first endpoint a message to reestablish the communication session; and

in response to the message, reestablishing the communication session between the second endpoint and the user of the first endpoint.

12. **(Original)** The method of Claim 11, wherein the step of reestablishing comprises transferring the communication session with the second endpoint from the first endpoint to a third endpoint associated with the user of the first endpoint.

13. **(Original)** The method of Claim 11, wherein the step of reestablishing comprises:

instructing the first endpoint to reset;  
waiting a predetermined period of time for the first endpoint to reset; and  
reestablishing the communication session between the first endpoint and the second endpoint if the first endpoint successfully resets during the predetermined period of time.

14. **(Original)** The method of Claim 13, wherein the step of reestablishing further comprises transferring the communication session with the second endpoint from a first endpoint to a third endpoint associated with the user of the first endpoint if the first endpoint does not successfully reset within the predetermined period of time.

15. **(Original)** The method of Claim 11, wherein the steps are performed by logic embodied in a computer readable medium.

16.     **(Original)** A communication device, comprising:  
an interface operable to receive keep alive signals from a first endpoint in a communication session with a second endpoint; and  
a processor operable to:  
detect an interruption in the keep alive signals;  
maintain a connection with the first endpoint after the interruption; and  
reestablish the communication session if the keep alive signals resume within a predetermined time period.

17.     **(Original)** The communication device of Claim 16, wherein the processor is further operable to transfer the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within a predetermined time.

18.     **(Original)** The communication device of Claim 16, wherein the communication device comprises a call manager.

19.     **(Original)** The communication device of Claim 16, wherein the communication session comprises a point-to-point communication session.

20.     **(Original)** The communication device of Claim 19, wherein the point-to-point communication session is established using Session Initiation Protocol (SIP) or H.323.

21.     **(Original)** The communication device of Claim 17, wherein transferring the communication session comprises:

determining an alternate endpoint associated with a user of the first endpoint; and  
communicating a message to a call manager instructing the call manager to establish the communication session between the second endpoint and the alternate endpoint.

22. **(Original)** The communication device of Claim 19, wherein transferring the communication session comprises:

determining an alternate endpoint associated with a user of the first endpoint; and  
communicating a message to the alternate endpoint instructing the alternate endpoint to reestablish the communication session with the first endpoint.

23. **(Original)** The communication device of Claim 16, wherein:  
the first endpoint is coupled to a transport control protocol / Internet protocol (TCP/IP) network;

the communication device is coupled to the TCP/IP network; and  
the keep alive signals comprise TCP/IP signaling information.

24. **(Original)** The communication device of Claim 16, wherein:  
the first endpoint is coupled to an Internet protocol (IP) network carrying packets over User Datagram Protocol (UDP);

the communication device is coupled to the IP network; and  
the keep alive signals comprise UDP signaling information.

25. **(Original)** The communication device of Claim 17, wherein:  
the first endpoint comprises a voice-over-IP (VoIP) telephone; and  
the third endpoint comprises a cellular telephone associated with a user of the VoIP telephone.

26. **(Original)** A communication device, comprising:  
an interface operable to receive keep alive signals from a first endpoint in a communication session with a second endpoint; and

a processor operable to:

detect an interruption in the keep alive signals;  
maintain a connection with the second endpoint after the interruption; and  
transfer the communication session with the second endpoint to a third endpoint.

27. **(Original)** The communication device of Claim 26, wherein the first and third endpoints are interactive voice response servers (IVRs).

28. **(Original)** The communication device of Claim 26, wherein the processor is further operable to:

store status information for the first endpoint; and

use the status information to resume the communication session with the third endpoint from approximately a point at which the interruption in keep alive signals was detected.

29. **(Original)** The communication device of Claim 26, wherein:  
the first endpoint is coupled to a transport control protocol / Internet protocol (TCP/IP) network;

the communication device is coupled to the TCP/IP network; and

the keep alive signals comprise TCP/IP signaling information.

30. **(Original)** The communication device of Claim 26, wherein:  
the first endpoint is coupled to an Internet protocol (IP) network carrying packets over User Datagram Protocol (UDP); and

the keep alive signals comprise UDP signaling information.

31. **(Original)** The communication device of Claim 26, wherein the processor is further operable to transfer the communication session automatically in response to a message from the first endpoint.

32. **(Original)** Logic embodied in a computer readable medium operable to perform the steps of:

- establishing a communication session between a first endpoint and a second endpoint;
- receiving keep alive signals from the first endpoint;
- detecting an interruption in the keep alive signals;
- maintaining a connection with the second endpoint after the interruption; and
- reestablishing the communication session between the first endpoint and the second endpoint if the keep alive signals resume within a predetermined time period.

33. **(Original)** The logic of Claim 32, wherein the logic is further operable to perform the step of transferring the communication session with the second endpoint from the first endpoint to a third endpoint if the keep alive signals do not resume within the predetermined time period.

34. **(Original)** The logic of Claim 32, wherein the logic is further operable to perform the steps of:

- notifying the second endpoint that the first endpoint has failed; and
- communicating a message to the first endpoint instructing the first endpoint to reboot.

35. **(Original)** The logic of Claim 32, wherein:  
the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;

- the third endpoint is also associated with the user in the directory; and

- the logic is further operable to perform the steps of:

- determining the user associated with the first endpoint using the directory; and
  - determining that the third endpoint is also associated with the user.

36. **(Original)** Logic embodied in a computer readable medium operable to perform the steps of:

- establishing a communication session between a first endpoint and a second endpoint;
- receiving keep alive signals from the first endpoint;
- detecting an interruption in the keep alive signals; maintaining a connection with the second endpoint after the interruption; and
- transferring the communication session with the second endpoint from the first endpoint to a third endpoint.

37. **(Original)** The logic of Claim 36, wherein:  
the first endpoint is associated with a user in a directory relating a plurality of users to a plurality of endpoints;

- the third endpoint is also associated with the user in the directory; and

- the logic is further operable to perform the steps of:

- determining the user associated with the first endpoint using the directory;

- determining that the third endpoint is also associated with the user.

38. **(Original)** The logic of Claim 36, wherein:  
the first and third endpoints are interactive voice response servers (IVRs); and  
the logic is further operable to perform the steps of:

- storing status information about the first endpoint; and

- using the status information to resume the communication session from approximately a point at which the interruption in keep alive signals was detected.



39. **(Original)** A system for recovering a communication session after failure of an endpoint, comprising:

means for establishing a communication session between a first endpoint and a second endpoint;

means for receiving keep alive signals from the first endpoint;

means for detecting an interruption in the keep alive signals;

means for maintaining a connection with the second endpoint after the interruption; and

means for transferring the communication session with the second endpoint to a third endpoint.